ABSTRACT

A method for extracting water from an aqueous solution of a protein comprising the steps of:

(a) intermixing the aqueous solution of the protein with a sufficient quantity of at least one glycol ether at a temperature at least 30 centigrade degrees above the lower critical solution temperature (LCST), preferably at least 20 centigrade degrees above the LCST, and most preferably at least 10 degrees above the LCST, to form a suspension comprising a concentrated aqueous protein phase and a liquid organic phase comprising said at least one glycol ether and at least 10 percent water extracted from the aqueous solution of the protein, wherein the glycol ether has an inverse solubility in water, with the proviso that the solubility of the glycol ether in water is significantly less than the solubility of water in the glycol ether, and the glycol ether does not significantly deactivate the protein, and

(b) separating the concentrated aqueous protein phase formed in step (a) from at least a portion of the liquid organic phase.